A REVIEW OF BRITISH BUTTERFLIES IN 1981

By Dr. C. J. LUCKENS*

For most species of butterfly in Britain 1981 seems to have been a poorer than average year. A fine warm spell in August possibly saved the season from complete disaster, but the indifferent weather which prevailed from late Spring, until late July was probably largely to blame for the general paucity of butterflies. Among the Satyridae, *Maniola jurtina* L. and *Pararge aegeria* L. were exceptions to the general rule and did well nearly everywhere in Southern England. There were particularly good reports of jurtina from Wiltshire (around Warminster) and several aberrations turned up in this area. In Dorset also, *jurtina* was up to strength, but only average numbers were reported from East Sussex. P. aegeria was noticeably common in the Summer brood in Dorset in August, and I saw it everywhere in the scrubby areas of the coastal valleys around Worth and Swanage. This butterfly was also common in Hampshire and Wiltshire, and though the first brood was very sparse in Sussex, the second brood was up to normal strength. *Melanargia galathea* L. also had a fairly good year and has apparently increased its range in the Chilterns recently. In East Sussex however, it was reported to be below average and very local in 1981. The hot weather in August brought out a good hatch of Maniola tithonus L. but Eumenis semele L. I found very scarce in the Swanage coastal area. It is now very local on the East Sussex downs but in the few sites remaining it produced reasonable numbers. Reports from East Kent suggest that it still possibly occurs on the cliffs between Dover and Folkstone, where its continued presence has been in doubt recently. Semele was common, though worn, on the New Forest heathland around Beaulieu and Dibden during the last week of August. Aphantopus hyperantus L. has declined markedly in many areas in the South East over the last few years. In mid Sussex, in particular, the reduction has continued and the Ringlet is now very local. A similar situation seems to have occured in Kent, and, to a lesser extent, in South Hampshire. It was locally common in East Wilts in 1981 with some arete/caeca forms turning up in the County.

The commoner Nymphalidae such as Aglais urticae L. and Nymphalis io L. had a patchy year. There were large numbers of the latter on our garden buddleias in Southampton but urticae was uncommon, and the temporary residents, Vanessa atalanta L. Vanessa cardui L., were almost non-existent until very late in the year and then there was a small sprinkling of each species. All recorders remarked on the scarcity of Polygonia c-album L. both broods in 1981. Limenitis camilla L. was late in appearing but in average numbers in the Wilts woods. In Sussex it apparently had a very bad year with only four to five seen during several hours observation in perviously favourable sites. Of Apatura iris L. there were somewhat

*Swallowfield, Manor Road, Durley, Hants. SO3 2AF.

conflicting reports. I saw none in mid-August in the woods on the East Wilts and Hants border (where there has been extensive devastation) and I was informed by one of the wardens that very few had been seen this year. Other reports however, were of numerous sightings in the same area, and also, over the Hampshire border near Romsey, iris was reputedly frequent in at least two woods. The Purple Emperor apparently held its own in the West Sussex woods around Plaistow. It is pleasing that this magnificent butterfly continues to thrive in these areas in spite of vagaries of weather and forestry policy. Argynnis paphia L., also the subject of somewhat conflicting reports, was recorded from Wilts as up to strength but late and still flying up to the second week of September. In East Sussex it is local but still present in reasonable numbers around Lewes. In the Plaistow area around fifty could be seen in a few hours' walking. There are no signs of serious decline further West in Devon and South Wales (Breconshire). A. aglaia L. had a patchy time, with poor numbers on the downs and woods west of Salisbury; but I saw a fair number in August in the East Wilts woods where the recent felling has harmed iris but possibly encouraged this fritillary. Aglaia was also plentiful in the Lulworth area of Dorset and in the Grange area in the Lake District. I have virtually no reports of Argynnis adippe D. & S. but that it was scarcer than usual in its West Wilts haunts.

In South Hampshire the smaller fritillaries were common in one wood near Fareham which has been coppiced in two large areas and is currently in prime condition for both *Clossiana selene* D. & S. and C. euphrosyne L. The latter butterfly was the dominant species of the two, but both were abundant. In contrast, euphrosyne was uncommon in Crab Wood west of Winchester and in poor numbers in the Whiteparish area. Further east both continued to decline; particularly selene, which may now be absent from Kent and was reported as scarcer than for some years in East Sussex, Moderate populations of both still occur in the West Sussex woods but even here both have declined in the last few years. Further West selene tends to do better and in Breconshire is apparently holding its numbers quite well. The parlous state of Mellicta athalia Rott. in the West Country where only two colonies apparently now exist, has made it the subject of legislation. In Kent however, good numbers were recorded in mid-June in the Thornden area of the Blean woods. Euphydryas aurinia Rott. is impossible to assess on anything other than a strictly local basis. I saw a good number of male Marsh Fritillaries on June 6th in a locality unfortunately threatened with development, near Ringwood. In August there were plenty of larval webs in the same site. Earlier on in mid-April I found several larvae in a riverside locality near Tavistock. I heard however, that aurinia was scarcer than usual in some of the Argyllshire coastal colonies.

Hamearis lucina L., formerly common in West Wood near Winchester, has gradually declined over the last few years, but 1981 was the first season I failed to see it there at all. The woods still look suitable in several places however, and the butterfly might well survive at low density there. In East Sussex and Kent lucina was reported as local and rare in 1981. The weather patterns in general favoured the late summer broods of Lycaenidae and several of the blues did quite well in August and September. Happily, this applied to Lysandra bellargus Rott, which appeared in good numbers in coastal Dorset, from Swanage westward to Lulworth. I saw this jewel of a butterfly in half a dozen places around Worth during the last week in August and early September. There were also encouraging reports from Kent where reasonably good numbers flew at Queenborough and Detling, though at the Folkstone grounds it was still rather low. There is apparently only one surviving colony in Wilts where it is holding its own, but in the Sussex localities it has declined and bellargus was described as local and rare in both broods. In Surrey it occurs near Guildford and here also it appears to have stabilised its position in 1981. L. coridon Poda on the other hand, did not share in this modest resurgence and appears to have been relatively uncommon nearly everywhere. I have records from Dorset, Sussex, Wilts and Surrey all painting the same picture of greatly reduced numbers. Only in Kent is it described as fairly common in 1981. This presumably refers to the Folkestone area where it has been low for a number of years and so, perhaps, represents an improvement, I thought the populations near Winchester showed reasonable promise in early August but coridon is slowly recovering from a low ebb here since 1977, and I did not expect great things. In the first brood, Polyonimatus icarus Rott, seems to have been disasterously low in most areas, but in the second brood the numbers were much better. Aricia agestis D. & S., on the other hand, was about in fair numbers in both broods, though its congener, A. artaxerxes Fab., was reported to be lower in numbers than usual in North West England around Morecambe Bay, Further north in Central Scotland it apparently enjoyed an average year. Cupido minimus Fuessl. was still present in early June on St. Catherine's Down near Winchester, where it seems to just hang on year after year; I had only one report of a second brood and that was from Westbury in Wiltshire. Celestrina argiolus L. was virtually un-recorded in 1981; I saw a single specimen near Romsey in early May, but none at all in the usual places around Worth Matravers in August. Thecla quercus L. seemed very low in the Wiltshire woods in August, and in a favoured Romsey wood 1 found only small numbers of ova during the Winter. Thecla betulae L. on the other hand had the exceptionally fine weather during its flight period, and ova were found in good numbers in the Hampshire and West Sussex localities I visited during December. Strymonidia pruni L. I am informed was very late and low in numbers in Northamptonshire. I have no information regarding the colonies around Oxford or from over the border in Buckinghamshire where I found it commonly at the end of June in 1980.

The Spring Pierids were present in good numbers in South Hampshire in late April, but then declined, and the Summer broods were surprisingly low in spite of better weather. Pieris brassicae L. was common at the end of August at the Winspit, however Anthocharis cardamines L. benefited from a good spell during its flight period in late April early May, and produced numerous imagines in this area. It showed up early in the season in South-West Surrey also, but in East Sussex the butterflies were very little in evidence though ova could be found easily. In general I believe the Orange Tip did not suffer unduly in 1981. The Brimstone also had an average season throughout the South and unusually good numbers of larvae were reported from mid Sussex. In some cases these virtually defoliated small buckthorns. Leptidea sinapis L. was both late and scarce in Salcey forest and a similar situation prevailed in the Durfold area of Surrey. I visited the sea cliffs between Seaton and Branscombe in South Devon in early June and found this delicate butterfly quite commonly on the rough grassy slopes. The last time I had visited these localities was in late July 1967, when several larvae were found on Lathyrus pratense but I failed to see imagines. The habitat did not seem to have suffered unduly in the interim. The small wood near Fareham which holds the thriving colonies of fritillaries also provided excellent conditions for Ervnnis tages L. and Pvrgus malvae L. Both skippers were common in the open, coppiced parts of this wood. Elsewhere I have reports only from Sussex where both species were very local and scarce. Thymelicus lineola Ochs. continues to increase its range in Southern England, though numbers were not as good as usual in 1981. It was reported from Pewley Down near Guildford for the first time and has appeared recently in several other places in West Surrey where it was previously unknown. Its congener, T. actaeon Rott., was common in late August around Swanage and Worth Matravers - especially at the Winspit. It was also reported to have increased in numbers in the Lulworth area in comparison to a previous count in 1979. Hesperia comma L. had an unremarkable year though records from the Dover area suggest it is perhaps gaining strength there. It is extremely local in East Sussex (one or two sites only) but, within these limits, produced an average brood in August. I have no data from Surrey, but in Hampshire numbers were maintained fairly well last year. In the West Highlands, Carterocephalus palaemon Pall. was in fairly good form last year, particularly in the colonies along the Great Glen. One of the Argyllshire sites was reported to be getting overgrown, but, in general, the butterfly is far more widespread in this area than formerly believed, and new colonies seem to turn up nearly every year.

It is hoped that this report will continue on an annual basis and that in future there will be slightly less bias toward the Southern half of the country. I appreciate that there are many demands on the time and patience of lepidopterists regarding requests for information but I would be grateful if readers could find the time to send me records and general news of butterfly populations in 1982.

I would like to thank the following lepidopterists for their contributions to this paper: Messrs K. N. Baskcomb, R. D. G.

Barrington, R. F. Bretherton, J. M. Chalmers-Hunt, F. Clouter (per J. M. Chalmers-Hunt), R. M. Craske, T. Melling, C. J. Randall (per J. M. Chalmers-Hunt), R. C. Revels, P. Sankey-Barker (per J. M. Chalmers-Hunt), P. Summers.

I owe a special debt to the late Maj.-Gen. C. G. Lipscomb who, only a few days before his death, sent me a detailed report on Wiltshire butterflies.

COLEOPHORA BINDERELLA KOLLAR – A NEW FOODPLANT. – Whilst collecting cases of *Coleophora serratella* L. which were feeding on the roadside *Carpinus* hedge to Finch Wood, Bonnington, Kent, on 21st. May 1981, I noticed a tricolorous case larva also feeding on the Hornbeam. It was reared on Hornbeam from the garden and the moth which subsequently emerged on 9th. July 1981 was referred to the British Museum whereupon Dr. J. D. Bradley kindly confirmed the species as *Coleophora binderella*. As far as I am aware *Carpinus* has not previously been recorded as a foodplant for this species in Britain. – N. F. HEAL, Fosters, Detling Hill, Nr. Maidstone, Kent.

A NOTE ON TWO BRITISH TRACHYPHLOEUS SPP. (COL.: CURCU-LIONIDAE). – T. scabriculus L.: this is peculiar among our species in possessing a marked sexual difference in the anterior tibiae, one sex having strongly developed tooth-bearing digitate projections at the apex rather as in T. spinimanus Germ., while in the other they are almost simple with much smaller teeth. Fowler (1891, Col. Brit. Isl., 5: 184) assigns the smaller teeth to the female, but that is incorrect, as may be easily proved by dissection; the large development of these structures is in fact a female character. Victor Hansen (1965, Danm. Faun., 69: 46) figures them for both sexes. Joy (1932, Pract. Handb. Brit. Beetles, 1: 180) makes no mention of a sexual difference; his figure of the tibia (2: 50, fig. 7) is of a male. Consequently a user of the book, unaware that such a disparity exists, might well find himself puzzled.

T. digitalis Gyll.: some coleopterists, both here and abroad*, have tended to look on this as a small form of T. spinimanus, and it is on the whole not well understood. The distinctions, not very fully stated in our literature, are slight but appear constant: *digitalis* is always smaller and of shorter form, with less numerous and less erect elytral setae which are much shorter, about twice as long as broad and thus scale-like - in spinimanus about four times, and thus bristle-like. The latter decisive character is figured by Hansen (l.c. supra: 47, figs. e,f). Further, Mr. J. A. Parry informs me that the spermatheca is quite different in the two species. T. digitalis is little recorded with us and is perhaps mostly Kentish. It formerly occurred very sparingly with others of the genus in the chalk pit at Darenth; and I took one at the base of the cliffs at Freshwater, Isle of Wight (v.48), possibly a new locality. It is worth noting that males of *digitalis* are unknown, whilst those of *spinimanus* (known from mountain areas in France) are not found in Denmark (Hansen, l.c.: 49) and probably not in Britain. - A. A. ALLEN.

*e.g. R. Frieser in Freude, Harde & Lohse, 1981, Die Käfer Mitteleuropas, 10: 238.